

DOCKET NO. 2019-224-E
DOCKET NO. 2019-225-E

**DUKE ENERGY CAROLINAS,
LLC'S AND DUKE ENERGY
PROGRESS, LLC'S FIRST SET
OF REQUESTS FOR
PRODUCTION OF DOCUMENTS
AND INTERROGATORIES TO
VOTE SOLAR**

Further, please take notice that these Requests for Production and Interrogatories are continuing in nature until the date of the hearing, and that any information or responsive materials identified after your responses have been served upon the undersigned counsel should be provided via supplemental discovery responses as soon as possible after such identification.

INSTRUCTIONS

1. Please produce the requested documents as they are kept in the usual course of business or to organize and label them to correspond with the categories in the Request. Documents attached to each other should not be separated.

2. In producing Documents, furnish all documents known or available to you, regardless of whether such documents are possessed directly by you or your agents, employees, representatives, investigators, or by your attorneys. All requests for Documents specifically request documents of Voted Solar as well as agents or consultants that Vote Solar has retained to provide expert testimony in this proceeding.

3. If any document otherwise responsive to any Request was, but is no longer, in your possession, subject to your control or in existence, identify each document by listing its author(s) and addressee(s), date, subject matter, whether the document(s) or copies are still in existence (and if so, their locations and the custodians), as well as whether the document is missing or lost, has been destroyed, has been transferred voluntarily to others, or has been otherwise disposed of. In each instance, explain the circumstances surrounding such disposition and identify the person(s) directing or authorizing its destruction or transfer, and the date(s) of such direction or authorization.

4. If a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, the legal and factual basis for each such claim, and a complete description of the information or document being withheld.

5. Unless otherwise stated, the relevant time period for these Requests is from January 1, 2018, until the present.

6. Each Request shall be reproduced at the beginning of the response thereto.

7. Please provide copies of the information responsive to each Request in native electronic working format with all data and formulas intact.

8. Please provide responses to the following data requests electronically. To the extent this is impracticable, the responses, including any responsive Documents, should be provided at the offices of Robinson, Gray, Stepp & Laffitte, LLC, 1310 Gadsden Street, Columbia, South Carolina 29201, or some mutually convenient location otherwise agreed to by the parties.

DEFINITIONS

1. **“Commission”** means the Public Service Commission of South Carolina.
2. **“Communication”** means the transmittal of information in the form of facts, ideas, Documents, inquiries, or otherwise, including every discussion, conversation, conference, or telephone call.
3. **“You”** and **“your”** means Vote Solar, Vote Solar’s witness(es) in this proceeding, including, but not limited to Tyler Fitch, and all of its members, agents, representatives and attorneys.
4. **“Dockets”** means Commission Docket Nos. 2019-224-E & 2019-225-E.
5. The term **“document”** is to be construed as broadly as permissible under Rule 34 of the South Carolina Rules of Civil Procedure and includes, but is not limited to, any printed, typewritten, handwritten or otherwise recorded information of whatever character, including, but not limited to, letters, memoranda, notes, diaries, reports, records, calendars, charts, audio and/or video tapes or discs, and photographs; computer programs or disks; electronic media records, however recorded and maintained, including, but not

limited to, electronic mail, voicemail messages, digital photographs and electronically scanned records of any type; recorded observations, statements, conversations or formal affidavits. Any carbon or photocopy of any such materials upon which notations have been made and all drafts are also included.

6. **“Person”** means any natural person or any business, legal, or governmental entity or association.

7. The terms **“related to”** and **“relating to”** or any variation thereof shall be construed to include refer to, summarize, reflect, constitute, contain, embody, mention, show, comprise, evidence, discuss, describe, comment on, concerning, regarding, eluding to, pertaining to, probative of, in connection with, dealing with, in respect of, about, involved, identifying or proving.

8. **“Identify,”** when referring to a Person, means to give, to the extent known, the Person’s full name, present or last known address, and when referring to a natural Person, additionally, the present or last known place of employment.

9. **“Identify,”** when referring to Documents, means to give, to the extent known, the (i) type of Document; (ii) general subject matter; (iii) date of the Document; and (iv) authors addressees and recipients.

10. **“Identify,”** when referring to an oral Communication, means to give, to the extent known, the identity of the speaker and of each Person who was present when the Communication was spoken, and the substance, date, and place of such Communication.

INTERROGATORIES

General

1-1. Please identify the state in which Vote Solar is legally domiciled and provide a list of each and every State in which Vote Solar is registered to do business.

ANSWER:

1-2. Please explain the general funding structure of Vote Solar, including by stating whether Vote Solar (1) collects membership dues from its approximately 90,000 members; (2) receives funding from private or institutional donors; and/or (3) receives funding from any other source, including public and private grants. To the extent Vote Solar is funded, in whole or in part, through donors, please identify its top ten (10) donors in 2020 and the dollar amount of funding provided by each individual or entity listed.

ANSWER:

1-3. Please identify any and all members of Vote Solar's Board of Directors and Leadership Council during the period 2018 to present who are employed by solar development companies that have developed or are currently in the business of developing utility-scale solar generation projects in South Carolina or North Carolina. For each such individual, please state his/her name, identify his/her employer, his/her current title, number of years served in a leadership or board role at Vote Solar.

ANSWER:

Testimony of Tyler Fitch, Vote Solar

1-4. Please identify all state regulatory proceedings (State, Docket, Date of Testimony) and civil litigation (State, Docket, Date of Testimony) in which Vote Solar witness Tyler J. Fitch has testified in the last five (5) years. For each proceeding or case identified, please provide a brief summary of the testimony, including identifying whether integrated resource planning was the focus and, if so, how Mr. Fitch's testimony addressed the issue.

ANSWER:

1-5. Please identify any relevant past publications Mr. Fitch has authored, any unpublished research to which he has contributed, and/or any relevant experience working for or alongside any utility for the purpose of preparing an integrated resource plan.

ANSWER:

1-6. Please describe Vote Solar's role, if any, in the drafting, publicizing or promoting of form letters intended to be sent by customers of Duke Energy to the Commission related to these Dockets and identify and provide any correspondence, mass electronic communications or other documents relating to Vote Solar's role and/or advocacy of the submission of form letters to the Commission.

ANSWER:

1-7. With respect to Mr. Fitch's work as a consultant for ICF International from 2013 to 2016, please describe the relationship, if any, between Mr. Fitch and members of

ICF who contributed to the ConEdison Climate Change Vulnerability Study attached to his testimony as Exhibit TF-5. In particular, please identify each contributor to the Study known to Mr. Fitch, any previous direct or indirect association between Mr. Fitch and such individual, as well as any collaborations between Mr. Fitch and any such individual since Mr. Fitch joined Vote Solar.

ANSWER:

1-8. Please identify each and every State Public Service Commission of which you are aware that has required a utility to incorporate climate risks into its integrated resource plan. For each such instance, please identify (i) the docket where the utility's resource plan was reviewed; and (ii) whether utilities subject to such requirements identified endogenous or exogenous climate risks in their integrated resource plan modeling.

ANSWER:

1-9. Please explain whether and how Mr. Fitch considered reliability risks of not meeting customer load in his evaluation of the climate risks facing DEC and DEP.

ANSWER:

1-10. Please explain whether and how Mr. Fitch considered hydrogen-capable gas generating technologies in his assessment of stranded cost risk and evaluation of the climate risks facing DEC and DEP.

ANSWER:

1-11. Please explain whether and how Mr. Fitch assessed the resource planning risks of a portfolio that meets summer peak load, but not winter peak load.

ANSWER:

1-12. Referring to Mr. Fitch's recommendation beginning at Page 6, Line 1 of his testimony, that Duke Energy should "submit a revised short-term action plan that builds analytical capability and stakeholder input for assessing and managing climate-related risks," please identify any other State Public Service Commission of which you are aware that requires or has required utilities to meet such requirements as part of their integrated resource planning process and provide the docket or decision where such requirements were established.

ANSWER:

1-13. Referring to Mr. Fitch's claim beginning at Page 6, Line 16 of his testimony, that "[a]ccording to [his] analysis, stranded asset costs to the Base Case with Carbon Policy alone could be \$4.8 billion in 2020 dollars[,]" please explain in detail the quantitative analysis Mr. Fitch undertook to reach this conclusion.

ANSWER:

1-14. Referring to Mr. Fitch's statement beginning at Page 13, Line 3 of his testimony, that "[t]he Duke 2020 Climate Report already identifies vulnerabilities to climate-related physical risks to its fleet in the Carolinas[,]" please identify any and all

other utilities of which you are aware that have similarly taken steps to identify such climate-related physical risks to their fleet.

ANSWER:

1-15. Referring to Mr. Fitch's statement beginning at Page 21, Line 6 of his testimony, that "Duke Energy Carolinas' 10-K report to shareholders has included disclosure of climate-related risks since at least 2001[.]" please identify any and all other utilities of which you are aware that have disclosed climate risk in their 10-K filings from 2001 to present and provide the year in which each utility first made such disclosure.

ANSWER:

1-16. Referring to Mr. Fitch's recommendation beginning at Page 40, Line 7 of his testimony, that "the Commission should direct Companies to perform a systematic assessment and disclosure of climate-related risks incident on the Companies' assets and operations," please identify any other State Public Service Commission of which you are aware that require utilities to meet such requirements as a component of their integrated resource planning process and filings.

ANSWER:

1-17. Referring to Mr. Fitch's statement beginning at Page 44, Line 8, please explain what analytical elements Mr. Fitch believes are needed to conduct a "systematic assessment of climate-related physical impacts[.]"

ANSWER:

1-18. Aside from the Con Edison Climate Change Vulnerability Study Mr. Fitch discussed beginning at Page 45, Line 17 of his testimony, please identify any other examples of utility best practices to mitigate climate risk exposure of which you are aware.

ANSWER:

1-19. Referring to Mr. Fitch's recommendation beginning at Page 54, Line 7 of his testimony, that the Commission should be required Duke Energy to "procur[e] intervenor license for software modeling and sharing inputs[.]" please identify each and every State Public Service Commission of which you are aware that requires utilities to provide intervenors with similar access to its modeling software and inputs as part of an integrated resource planning proceeding and provide the docket or decision where such requirements were established.

ANSWER:

1-20. As provided in the instructions to these Interrogatories, if a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, and the legal and factual basis for each such claim, and provide a complete description of the information being withheld.

ANSWER:

Carbon Stranding: Climate Risk and Stranded Assets in Duke's Integrated Resource Plan (the "Carbon Stranding Report")

1-21. Please identify the state in which Energy Transition Institute ("ETI") is legally domiciled and provide a list of each and every State in which ETI is registered to do business.

ANSWER:

1-22. Please explain the general funding structure of ETI, as understood by Mr. Fitch, including by stating whether ETI (1) collects membership dues; (2) receives funding from donors; and/or (3) receives funding from any other source, including public and private grants and GoFundMe campaigns.

ANSWER:

1-23. Please explain the relationship between Mr. Fitch and ETI, including by identifying whether Mr. Fitch holds a temporary, permanent, or independent contractor position with ETI, the name of any such temporary or permanent position, any payments Mr. Fitch has received from ETI, and a list of publications, speaking engagements, and/or other collaborative efforts between Mr. Fitch and ETI.

ANSWER:

1-24. Please provide a current curriculum vitae or otherwise identify the professional qualifications of each individual identified as providing "edits, input, and/or support" to Mr. Fitch regarding his Carbon Stranding Report, including: Sachu Constantine, Claudine Custodio, Emily Grubert, Richard Harkrader, Steve Levitas, Taylor

McNair, Odette Mucha, Suzanne Mullins, Tyler Norris, Mike O'Boyle, and Nathan Phelps. For each such individual, please identify the type of work performed or contributions provided with respect to Mr. Fitch's Carbon Stranding Report.

ANSWER:

1-25. For each figure presented in the Carbon Stranding Report, please identify and describe any analytical model used to analyze and present data and identify whether it was developed by Mr. Fitch, ETI, or a third party. If a third party model was used, please identify the developer. In addition, please identify and explain:

- a. Whether the figure was prepared using a spreadsheet-based model or a programming language. If the latter, please specify the programming language used;
- b. The assumptions used with respect to fuel prices, emissions from coal and gas units, demand curves, and the capacity factors for coal and gas units by year;
- c. The transmission constraints the model uses to model seasonal operation and capacity factors; and
- d. How the model addresses uncertainty in the inputs and outputs.
- e. Identify and produce any outputs in native format generated by the analytical model used.

ANSWER:

REQUESTS FOR PRODUCTION

1-1. Please produce copies of all data requests, requests for production, interrogatories, or other communications that have been received by Vote Solar in connection with the Dockets. Please produce these as soon as practicable after they are received. Please consider this an ongoing request.

RESPONSE:

1-2. Please produce copies of Vote Solar's responses to all data requests, requests for production, interrogatories, or any other information provided by Vote Solar in connection with the Dockets. This includes all documents, electronic files or other attachments that were that were provided, or made available for on-site inspection. Please produce these at the same time they are provided to the requesting party, or if that is impossible, as soon as practicable thereafter.

RESPONSE:

1-3. Please produce copies of all data requests, requests for production, interrogatories, or any other request for information that Vote Solar has served on other parties in connection with the Dockets. Please produce these at the same time they are served on the other party. Please consider this an ongoing request.

RESPONSE:

1-4. Please produce copies of the responses to all data requests, requests for production, interrogatories, or any other request for information that Vote Solar has served

on other parties in connection with the Dockets. Please produce these as soon as practicable after they are received. Please consider this an ongoing request.

RESPONSE:

1-5. Please produce any and all documents identified, referred to, or relied upon in preparing your response to Duke Energy's First Set of Interrogatories to Vote Solar.

RESPONSE:

1-6. Please produce all documents, including, but not limited to, all workpapers and/or quantitative analysis developed by you or others and that are used to support the analysis and/or conclusions presented by Mr. Fitch in the Carbon Stranding Report.

RESPONSE:

1-7. Please produce all promotional materials, including, but not limited to, email and print communications and social media posts, through which Mr. Fitch, ETI, and/or Vote Solar advertised, promoted, or otherwise publicized the Carbon Stranding Report.

RESPONSE:

1-8. For the period September 1, 2020, to present, please identify and produce any and all form letters from customers to Duke Energy drafted, in whole or in part, by Vote Solar, as well as any correspondence, mass electronic communications or other

documents relating to Vote Solar's role and/or advocacy of the submission of form letters to the Commission.

RESPONSE:

1-9. Referring to Mr. Fitch's statement beginning at Page 6, Line 16 of Mr. Fitch's testimony that "[a]ccording to [his] analysis, stranded asset costs to the Base Case with Carbon Policy alone could be \$4.8 billion in 2020 dollars[,]" please produce any and all quantitative calculations, analysis and/or workpapers that Mr. Fitch contends supports this conclusion.

RESPONSE:

1-10. Please identify and produce all correspondence, draft versions of the Carbon Stranding Report and other Documents shared between Mr. Fitch and the following individuals that provided "edits, input, and/or support" to the Carbon Stranding Report, as identified in the Carbon Stranding Report: Sachu Constantine, Claudine Custodio, Emily Grubert, Richard Harkrader, Steve Levitas, Taylor McNair, Odette Mucha, Suzanne Mullins, Tyler Norris, Mike O'Boyle, and Nathan Phelps.

RESPONSE:

1-11. Please produce any and all workpapers and/or quantitative analysis used to prepare the figures presented in the Carbon Stranding Report, including, but not limited to documents that show, for each figure:

- a. The analytical model used to analyze and present data;

- b. The assumptions used with respect to fuel prices, emissions from coal and gas units, demand curves, and the capacity factors for coal and gas units by year;
- c. The transmission constraints the model uses to model seasonal operation and capacity factors;
- d. How the model addresses uncertainty in the inputs and outputs; and
- e. The outputs, in native format, generated by the analytical model used.

RESPONSE:

1-12. As provided the instructions to these Requests for Production, if a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, and the legal and factual basis for each such claim, and provide a complete description of the information or document being withheld.

RESPONSE:

Dated this 12th day of February, 2021.

/s/Heather S. Smith

Heather S. Smith
Deputy General Counsel
Duke Energy Carolinas, LLC
Duke Energy Progress, LLC
40 W. Broad Street, Suite 690
Greenville, South Carolina 29601
Phone: (864) 370-5045
Email: heather.smith@duke-energy.com

Rebecca J. Dulin
Associate General Counsel
Duke Energy Carolinas, LLC
Duke Energy Progress, LLC
1201 Main Street, Suite 1180
Capital Center Building
Columbia, South Carolina 29201
Phone: (903) 988-7130
Email: rebecca.dulin@duke-energy.com

and

Samuel Wellborn
Robinson, Gray, Stepp & Laffitte, LLC
1310 Gadsden Street
Columbia, South Carolina 29201
Phone: (803) 231-7829
Email: swelborn@robinsongray.com

*Attorneys for Duke Energy Carolinas, LLC
and Duke Energy Progress, LLC*